**What is the Real Time Immunization Monitoring System?**

With support from the Centers for Disease Control and Prevention (CDC), researchers at the Johns Hopkins School of Public Health have developed an internet survey system to help monitor the safety of seasonal and H1N1 influenza vaccines across the United States. The initial online survey takes 3 – 4 minutes to complete, and will ask questions about which vaccine a patient received and how they felt afterward. There are two short follow-up online surveys 1 week and 6 weeks later. The survey can be found at www.myflushot.org

**Do pregnant women respond well to the 2009 H1N1 vaccine?**

Healthy pregnant women mount a robust immune response following just one dose of 2009 H1N1 influenza vaccine, according to initial results from an ongoing clinical trial sponsored by the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health. The immune responses seen in these healthy pregnant women are comparable to those seen in healthy adults at the same time point after a single vaccination, and the vaccine has been well tolerated.

**Is the 2009 H1N1 LAIV as effective as the inactivated vaccine?**

Both 2009 Monovalent vaccines have been demonstrated to be effective in children and adults. However, data directly comparing the efficacy or effectiveness of these two types of influenza vaccines are limited and insufficient to identify whether one vaccine might offer a clear advantage over the other in certain settings or populations.

**What percentage of children 9 years of age and younger develop influenza antibodies after a single influenza vaccine dose?**

The National Institute of Allergy and Infectious Diseases (NIAID) reported preliminary results of a study among children aged 6 months--18 years. Among children aged 6--35 months, 3--9 years, and 10--17 years immunized with a 15 $\mu$g inactivated influenza A 2009 (H1N1) monovalent vaccine (Sanofi Pasteur, Inc., Swiftwater, PA), 25%, 36% and 76%, respectively, developed antibody titers of 1:40 or more (hemagglutination-inhibition assay) after a single dose of vaccine. Children aged 6 months--9 years receiving influenza A (H1N1) 2009 monovalent vaccines should receive 2 doses, with doses separated by approximately 4 weeks; persons aged ≥10 years should receive 1 dose

**A child age 3 to 9 years being vaccinated for the first time mistakenly receives a 0.25mL (pediatric) dose rather than the recommended 0.5mL dose. Should the first dose be repeated?**

Any vaccination using less than the standard dose should not be counted, and the person should be re-vaccinated according to age. The second dose should be administered at least 4 weeks after the first dose and should be 0.5mL.

**Should the 2009 H1N1 influenza vaccine be given to someone who had an influenza-like illness between April and now?**

If an influenza-like illness (ILI) was confirmed as H1N1 by reverse transcriptase polymerase chain reaction (RT-PCR), then vaccination with H1N1 monovalent vaccine is not necessary for the 2009-2010 season. If the ILI was not confirmed by RT-PCR, then the person should be vaccinated if indicated. There is no harm in vaccinating a person who had 2009 H1N1 influenza in the past.

**What can I say to patients who think the H1N1 influenza vaccines are "new" or experimental?**

The 2009 H1N1 influenza vaccines are being produced by the same companies using the same procedures used to produce seasonal influenza vaccines. The 2009 H1N1 vaccines are exactly the same as seasonal influenza vaccines except for the strain of influenza virus they contain. One way to approach this discussion is to emphasize that the 2009 H1N1 vaccine is not a "new" vaccine but rather is a change in the strains (just as is done in preparing new vaccine for each influenza season). Each year, experts look at the strains that are likely to be circulating during the next influenza season, and put those into the upcoming year's influenza vaccine. That's exactly what has been done in this case.
Most of the seasonal influenza vaccines distributed over the last decade have included H1N1-like strains. If the timing had been better, it is possible that the 2009 H1N1 strain could have been included in the 2009-2010 seasonal influenza vaccine.

**Do any of the H1N1 influenza vaccines include an adjuvant?**

No.

**Do the H1N1 influenza vaccines use thimerosal as a preservative?**

All multidose vials of influenza vaccine (both seasonal and H1N1) contain thimerosal as a preservative. There is no evidence that thimerosal is harmful. CDC recommends that pregnant women and children may receive influenza vaccine with or without thimerosal. However, because some pregnant women and parents are concerned about exposure to thimerosal, manufacturers are producing some preservative-free seasonal and 2009 H1N1 influenza vaccines in single-dose syringes.

The live intranasal H1N1 influenza vaccine is packaged in single doses so it does not use a preservative; however, it cannot be used for pregnant women or children younger than age 2 years.

**Can healthcare workers who cannot receive the nasal-spray vaccine (e.g., pregnant women, older adults, persons with chronic medical conditions) administer this vaccine to others?**

Yes. Healthcare workers who cannot get the nasal-spray vaccine themselves can administer the vaccine to others.

**Is it legal to translate CDC's English-language VIS?**

Permission is not required to translate a VIS. However, providers should not change the text of a VIS or write their own VISs. It is permissible to add a practice's name, address, or phone number to an existing VIS.
If your organization decides to have some VISs translated, consider sharing the translations with the Immunization Action Coalition for possible posting to their website. You can access the guidelines for translations at
http://www.immunize.org/printmaterials/print_translate.asp

**FDA Comissioner Addresses Nation's Healthcare Professionals on H1N1 Vaccine November 10, 2009:**

http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm189691.htm

# Influenza A (H1N1) 2009 Monovalent Vaccine Dosage Chart

| Inactivated, Injectable Influenza Vaccine | | | | |
|---|---|---|---|---|
| **Manufacturer** | **Age** | **Dose–Presentation** | **Number of Doses** | **Route–Site** |
| sanofi pasteur | 6 through 35 months[1] | 0.25 mL–prefilled syringe[1] | 2[2] | Intramuscular[3] |
| | 36 months and older | 0.5 mL–prefilled syringe | 1 or 2[2] | |
| | 6 months and older | Dose per age–multidose vial | | |
| Novartis Vaccine | 4 years and older | 0.5 mL–multidose vial | 1 or 2[2] | Intramuscular[3] |
| | | 0.5 mL–prefilled syringe | | |
| CSL | 18 years and older | 0.5 mL–prefilled syringe | 1 | Intramuscular[3] |
| | | 0.5 mL–multidose vial | | |

1 Children age 6 through 35 months should receive 0.25 mL vaccine per dose. Children age 36 months through adults should receive 0.5 mL vaccine per dose. See footnote 2 to determine number of doses.

2 Based on currently available information, children 6 months through 9 years who are receiving injectable influenza A (H1N1) 2009 Monovalent vaccine should receive two doses of vaccine separated by approximately 4 weeks.

3 Children 6 months through 2 years of age should be vaccinated in the anterolateral aspect of the thigh. Older children and adults should be vaccinated in the deltoid muscle if muscle mass is adequate. The anterolateral aspect of the thigh may be used as an alternate.

| Live Attenuated Nasal Spray Influenza Vaccine (LAIV) | | | | |
|---|---|---|---|---|
| **Manufacturer** | **Age** | **Dose–Presentation** | **Number of Doses** | **Route** |
| MedImmune | 2 through 49 years if healthy and non-pregnant | 0.2 mL–Spray ½ of dose into each nostril as indicated on the syringe. | 1 or 2[4] | Intranasal |

4 Based on currently available information, healthy children 2 through 9 years of age who are receiving live attenuated influenza A (H1N1) 2009 Monovalent vaccine should receive two doses separated by approximately 4 weeks.

For more information call **800-CDC-INFO** (800-232-4636) Website **www.cdc.gov/flu**

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